

**Environmental Protection Agency**  
**Fiscal Year 2014 Program Review**  
**Of the**  
**Texas Commission on Environmental Quality**  
**Public Water Supply Supervision Program**

**Final Report May 2015**

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## **I. Introduction**

This report provides a review of TCEQ's PWSS Program under the Safe Drinking Water Act (SDWA). Title 40 of the Code of Federal Regulations (CFR) part 142.17 (a)(1) states: "At least annually the Administrator shall review, with respect to each State determined to have primary enforcement responsibility, the compliance of the State with the requirements set forth in 40 CFR part 142, subpart B, and the approved State primacy program." This review examines TCEQ's drinking water rules implementation as well as reporting and documents TCEQ's initiatives, activities, and achievements undertaken to meet and/or exceed the national drinking water standards.

TCEQ's Public Drinking Water Section (PDWS) is tasked to implement new and more protective drinking water rules and also undertake data management challenges. EPA will continue to work in partnership with TCEQ to strengthen the PWSS program, assist with adopting new primacy requirements, enhance program efficiency and compliance determinations, and ultimately assure consumers access to cost effective, safe, and superior quality drinking water. EPA recognizes that TCEQ has dedicated staff willing to work to uphold a high quality PWSS program as evidenced in this review.

## **II. Highlights and Recommendations**

1. TCEQ continues pursuing primacy revision approval for the Ground Water Rule (GWR). TCEQ will implement the GWR according to the EPA requirements in the interim.
2. TCEQ is preparing the Revised Total Coliform Rule (RTCR) crosswalk and rule package. TCEQ and EPA will work to complete a final program revision package that will be a joint package of the RTCR and revisions and clarifications of some GWR language. EPA approved TCEQ's RTCR two-year extension request on March 4, 2015, and intends to provide the complete primacy package by no later than February 13, 2017.
3. EPA commends TCEQ for achieving the Performance Activity Measures (PAM) above the targets illustrated in Appendix G.
4. TCEQ did not achieve the FY 2014 Source Water Protection (SWP) Performance Measures SP 4(a) & (b), shown in Appendix H.
5. The reported TCEQ FY 2013 Sanitary Survey Performance Measure (SDW-1a) was 95% which exceeds the SDW-1a 91% EPA target as indicated in Appendix H. *(Note: The FY 2014 data has not been provided yet from EPA Headquarters and once received, the report will be updated to reflect the respective data.)*
6. TCEQ should continue to ensure sanitary survey data is entered and reported comprehensively to the Safe Drinking Water Information System/Federal Version (SDWIS/FED) database.
7. FY 2014 timeliness and completeness of Texas SDWA data submitted to SDWIS/FED continues to improve and continues to meet EPA reporting requirements. TCEQ's uploading of inventory and action records error rate for FY 2014 was below 0.1% on average.
8. In review of the TCEQ Top 50 Systems in Violation by Population Table as shown in Appendix K, the top two rules in violation are the Public Notification Rule and the Lead and Copper Rule. As a follow up to the report, EPA Region 6 would like to work with TCEQ to develop a compliance strategy to address decreasing the number of violations for each of these rules.

9. Unliquidated Obligations (ULO), primarily for the Texas Drinking Water State Revolving Fund (DWSRF) Loan fund, continue to be an issue due to increased scrutiny of the federal budget. We commend TCEQ for continuing to aggressively draw down funds from the DWSRF set-asides in a timely manner.
10. The PWS data used for this report was obtained from the SDWIS/FED database between 10/01/2013 - 9/30/2014; this data was frozen as of October 2014 and does not reflect future updates.
11. The FY 2014 Enforcement Program Review was Wednesday, March 11, 2015, and separate report of the review will be finalized by Medhi Taheri, the Texas Enforcement Coordinator. Please contact Mr. Taheri for more information as he can be contacted at [taheri.mehdi@epa.gov](mailto:taheri.mehdi@epa.gov) or at 214.665.2298.
12. EPA appreciates the continued forthcoming and receptive TCEQ relationship. EPA also recognizes the continued TCEQ PWSS partnership in such areas as EPA program reviews, primacy adoption, Safe Drinking Water Information System/State Version (SDWIS/STATE) work, disaster response, and other initiatives.

### **III. Texas Drinking Water System Universe**

Public water systems (PWS) provide water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serve an average of at least 25 people for at least 60 days a year. EPA has defined three types of public water systems:

1. Community Water System (CWS): a public water system that regularly supplies water to at least 25 year-round residents or to at least 15 service connections.
2. Non-Transient Non-Community Water System (NTNCWS): a public water system that is not a community water system and that regularly supplies water to at least 25 of the same people at least six months per year. Some examples are schools, factories, office buildings, and hospitals which have their own water systems.
3. Transient Non-Community Water System (TNCWS): a non-community water system that does not regularly serve at least 25 of the same persons over six months of the year such as a gas station or campground.

PWS sources are:

- Ground water (GW)
- Purchased ground water (GWP)
- Surface water (SW)
- Purchased surface water (SWP)
- Ground water under the influence of surface water (GUI) or (GWUDI) and
- Purchased ground water under the influence of surface water (GUP)

EPA water system size classifications used in this report are:

- Small systems - serve 25 to 3,300 people
- Medium systems - serve 3,301 to 10,000 people
- Large systems - serve more than 10,000 people

According to SDWIS/FED, the State of Texas has a total of 6,946 PWSs serving 26,817,037 people in FY 2014, as illustrated in the following Texas PWSs Population Table below. [Note: Period pulled reflects the federal FY 2014 timeframe (10/1/2013-9/30/2014). SDWIS/FED quarterly data frozen as of 1/1/2015 and pulled on 2/3/2015.]

**Texas FY 2014 SDWIS-Fed PWS Population Table**

PWS Type	GU		GUP		GW		GWP		SW		SWP		TOTAL	
	SYS	POP	SYS	POP	SYS	POP	SYS	POP	SYS	POP	SYS	POP	SYS	POP
<b>CWS</b>	20	23,191	1	2,010	3,202	5,161,042	196	418,442	316	11,796,783	900	8,624,468	4,635	25,703,652
<b>NTNC</b>			-	-	781	222,750	16	7,850	7	4,587	99	282,630	903	514,693
<b>TNC</b>	10	1,637	-	-	1,282	236,202	31	6,635	14	11,004	71	17,806	1,408	268,099
<b>Sum</b>	30	24,828	1	2,010	5,265	5,619,994	243	432,927	337	11,812,374	1,070	8,924,904	<b>6,946</b>	<b>26,817,037</b>

## V. TCEQ Public Water Supply Supervision (PWSS) Program

### IV. A. TCEQ Organization

**Background:** Prior to and immediately after federal promulgation of the SDWA, PWSS Program responsibility resided with the Texas Department of Health. In 1990, the program was transferred to the Texas Water Commission, which was reorganized into the Texas Natural Resource Conservation Commission (TNRCC) in 1992. In 2003, the TNRCC was renamed the TCEQ. The applicable organization charts are shown as listed below:

1. The TCEQ organization chart is shown in Appendix A
2. The Office of Water - Water Supply Division (WSD) organization chart is shown in Appendix B
3. The Public Drinking Water Section organization chart is shown in Appendix C
4. The WSD Contact Table is shown in Appendix D

The TCEQ PWSS program involves three offices and multiple divisions. The Office of Water (OW) houses the WSD. The Office of Compliance and Enforcement (OCE) contains the Enforcement Division (ED), Regional Offices, and the Monitoring Division. The Office of Waste (OW) houses the Permitting & Registration Support Division (PRSD), where the operator certification program is currently located.

**Reorganization update:** Legislation from the 83<sup>rd</sup> Texas Legislative Session transferred the economic regulation of water and sewer utilities from the TCEQ to the Public Utility Commission (PUC) on September 1, 2014. The authority transferred includes water and wastewater utility ratemaking; wastewater utility sub metering; sale, transfer, and merger of a utility; certificates of convenience and necessity; certain financial and managerial practices; reporting requirements; and consumer assistance and complaints. After September 1, 2014, the TCEQ retained its jurisdiction over the creation of, and bond reviews for water districts. The TCEQ reviews the creation of applications for general-law water districts and bond and miscellaneous applications for water

districts to fund water, sewer, and drainage projects. Fourteen staff and six vacant positions from the Utilities program were transferred to the PUC on September 1, 2014.

#### **IV. B. TCEQ's Regulating PWSs Responsibility and Authority**

TCEQ's public drinking water program is a part of the state's PWSS program. The state is required to maintain a PWSS program in order to retain primary enforcement authority (primacy) over Texas public water systems' (PWSs') compliance with the SDWA and its amendments.

The TCEQ's PWSS program is implemented by many areas within the agency as indicated below. The EPA provides flexibility to primacy agencies for some PWSS program activities by requiring TCEQ to develop a program for certain activities, with EPA approval of the program. TCEQ is required to:

1. Adopt, implement, and support compliance with drinking water rules at least as stringent as the federal rules. This is done by the Public Drinking Water Section of the Water Supply Division in the Office of Water (OW/WSD/PDWS).
2. Deliver PWS inventory, violation, and action data to EPA (OW/WSD/PDWS).
3. Ensure compliance monitoring and compliance determination for chemical and microbiological standards, ensure initial water quality meets minimum standards before approving a new source (OW/WSD/PDWS).
4. Assess the source water vulnerability of all drinking water sources in the state and provide support to help public water systems protect those source waters (OW/WSD/PDWS).
5. Review and approve engineered plans for PWS infrastructure improvements. This is done by the Plan and Technical Review Section of the Water Supply Division in the Office of Water (OW/WSD/UTR).
6. Support programs for capacity development (OW/WSD).
7. Oversee compliance with and provide technical assistance for Homeland Security requirements for PWSs (OW/WSD/PDWS).
8. Perform sanitary surveys of source, treatment, distribution, storage, pump facilities, data verification, management, operation, and operator compliance for new and existing PWSs. This is done by the Regional Offices of the Office of Compliance and Enforcement (OCE/Regions).
9. Ensure formal enforcement action for PWSs that exceed compliance trigger levels agreed upon by TCEQ and EPA. TCEQ's Enforcement Division of the Office of Compliance and Enforcement maintains this part of the PWSS program (OCE/ED).
10. Maintain a licensing program for PWS operators. The Operator Licensing Section runs this program (OOW/PRS).
11. Maintain a laboratory certification program for the analysis in the drinking water matrix. This is done by the Quality Assurance Section in the Monitoring Division in the Office of Compliance and Enforcement (OCE/MD).

12. Review the creation of applications for general-law districts and bond and miscellaneous applications for water districts to fund water, sewer, and drainage projects (OW/WSD/DIST).

The National Primary Drinking Water Regulations, adopted under the Safe Drinking Water Act, can be found in Title 40, Code of Federal Regulations Part 141 and special primacy requirements found in Part 142. The rules that TCEQ adopts and implements can be found in 30 TAC 290.

Primacy is a status that must be maintained. As EPA promulgates new regulations, Texas continues to adopt the new requirements under State law and applies for primacy revisions for those requirements. TCEQ historically does not adopt the EPA rule citations by reference. TCEQ is required by state law to write all new regulations to be equivalent to the federal regulations.

TCEQ currently implements a successful PWSS program through financial, managerial, and technical assistance, preventive efforts, and customer service, as well as through regulatory and enforcement actions. Preventive efforts are aimed at notifying and educating an operator about requirements, and can result in avoiding critical problems. TCEQ also conducts outreach and education activities to promote understanding of and compliance with their regulations. These activities are based on the belief that most water suppliers want to do the right thing if they understand how and why it must be done.

[Reference: <http://www.tceq.texas.gov/drinkingwater/pwss.html>.]

## **V. Primacy Review**

### **V. A. Primacy Requirements**

TCEQ continues to meet the federal primacy requirements indicated above and listed in Appendix E. The SDWA includes a requirement that EPA establish and enforce such standards as maximum contaminant levels (MCL), treatment techniques, and the monitoring that PWSs must adhere to. Texas is required to maintain a PWSS program in order to retain primacy.

### **V. B. SDWA PWSS Program Revisions**

#### **1) Primacy Revision Applications**

TCEQ intends to submit a joint Texas Regulation package, to include:

1. Ground Water Rule (GWR) [revisions and clarifications based on EPA comments]
2. Revised Total Coliform rule (RTCR)

The complete-and-final primacy revision package requires:

- Adopted Texas Regulations
- EPA approved Crosswalk
- Texas Attorney General's Enforceability Certification

EPA final determination includes the following:

- EPA Regional Program and Office of Regional Council approval (confirming the Texas regulation equivalency to the 40 CFR Part 141 and 142)
- EPA HQ (including any necessary Office of General Council) approval
- Public Notice
- Opportunity for Hearing
- EPA's Final Determination

**GWR:** The Texas GWR has been adopted in the Texas Regulations. EPA reviewed the GWR final crosswalk and had comments that need to be addressed relative to the comparative National Primary Drinking Water Regulations (NPDWR) for stringency and completeness. EPA has determined that the Texas Regulations will need to be updated to achieve GWR crosswalk approval and to comprise a complete-and-final primacy revision package. The Texas GWR revision is intended to be submitted as a joint final primacy revision package with the RTCR by no later than February 13, 2017. TCEQ is implementing the GWR in accordance to Federal requirements in the interim. TCEQ has an interim primacy agreement in place for the GWR pursuant to 40 CFR 142.13 (e).

**RTCR:** TCEQ is preparing the RTCR crosswalk. TCEQ and EPA will work to complete a final program revision package in combination with the GWR complete-and-final primacy revision package. EPA approved TCEQ's RTCR two-year extension request on March 4, 2015, and intends to provide the complete primacy package by no later than February 13, 2017.

**Variance and Exemptions (V&E) Regulations:** V&E was adopted by TCEQ in October 2005. The latest V&E crosswalk was created by direct reference to the federal regulations. EPA received V&E Attorney General Certification on May 5, 2008. TCEQ is not currently using the V&E regulations.

## **2) Approved Primacy Revisions**

The Texas approved Primacy Revisions are shown in Appendix F. Texas has primacy for the: Total Coliform Rule (TCR), Consumer Confidence Report Rule (CCR), Phase II/V Regulated Chemical Contaminants Rules, Lead and Copper Rule (LCR) [including LCR Minor Revisions (LCRMR) & LCR Short Term Revisions (LCRSTR)], Surface Water Treatment Rule (SWTR), Interim Enhanced SWTR (IESWTR), Long Term 1 & 2 IESWTR (LT1 & LT2), Arsenic Rule, Stage 1 & 2 Disinfectants and Disinfection Byproducts Rule (DBP1 & DBP2), Public Notification Rule (PN), Filter Backwash Recycling Rule (FBRR), and the Interim and Revised Radionuclides Rules.

## **V. C. Drinking Water Rules Implementation**

Appendix G shows EPA's drinking water Performance Activity Measures (PAMs). The PWS Violation Tables are shown in Appendix I and J. Appendix I shows the Texas FY 2014 Number of Systems with Violations Table and Appendix J shows the Number of Total Violations Table. As referenced under II. Highlights and Recommendations, the data reflects the FY 2014 review time frame of 10/01/2013 - 9/30/2014, and was pulled 2/3/2015.

TCEQ achieved PAMs results that exceed the targets illustrated in Appendix G. One of the drinking water measures reflecting public health improvements is 2.1.1 - Water Safe to Drink: The EPA Region 6 FY 2014 2.1.1 goal is 90%. The Texas 2.1.1 rate achieved is 92.8%, higher than the EPA goal. EPA commends TCEQ for Texas water system performance above and beyond the PAMs expectations.

### **1) Chemical Monitoring**

**Compliance Agreements:** The TCEQ inorganic contaminant (IOC) and radionuclide (Rad) violations' primary enforcement actions have involved Compliance Agreements (CA). TCEQ CAs (also referred to as Bilateral Compliance Agreements) had enforceable three-year end dates, except for fluoride violations that have a five-year closing date. TCEQ began implementing the National Enforcement Response Policy (NERP) in May 2011. TCEQ ceased issuing CAs during FY 2011 because they were deemed not to be enforceable formal actions under EPA criteria.



To address systems with source water contamination and no other compliance issues, the TCEQ's Enforcement Division utilized an enforcement order with requirements for feasibility studies or equivalent, any required follow-up actions, assessed penalties, and compliance period deadlines for the system to come into compliance. In developing this enforcement protocol, the TCEQ's Enforcement Division handled enforcement actions that were previously issued by EPA Region 6.

**a) Inorganic Contaminants (IOCs):**

**Arsenic:** When a Texas PWS exceeds the Arsenic MCL, TCEQ requires quarterly public notices. To resolve the running annual average (RAA) violation, PWSs must seek either treatment methods or alternative water sources under a formal enforcement order as defined in the National Enforcement Response Policy. Feasibility Analyses (FA) or their equivalent are required by TCEQ to investigate the available options and determine the costs (capital and operation-and-maintenance). TCEQ can provide financial, managerial, and technical (FMT) assistance through a contractor (i.e. Texas Rural Water Association) or the PWS can hire a consultant to conduct the FA. The non- treatment options may include either 1) obtain a new source, or 2) isolate the low arsenic well water level.

The arsenic treatment options often include:

- Removal and blending
- Adsorption medias (Ferric Oxide & Activated Alumina)
- Ion Exchange
- Hybrid-Ion Exchange/Adsorption Media
- Precipitation and filtration
- Reverse Osmosis
- Point-of-use/point-of-entry (POU/POE)

Typical Funding Options include:

- Texas Water Infrastructure Coordinating Committee (TWICC) funding group
- Drinking Water State Revolving Fund (DWSRF) Loan program
- Rate Increase

**Nitrate / Nitrite:** TCEQ requires systems to sample for nitrate annually. TCEQ is requiring nitrate quarterly repeat sampling for systems with initial monitoring results greater than one-half the 10 mg/L MCL. Such monitoring is at the State discretion. TCEQ is also requiring systems with initial monitoring results greater than or equal to the MCL to perform quarterly nitrites sampling, which can only be reduced to annual sampling after four consecutive quarterly samples below the MCL.

**Fluoride:** EPA set the enforceable maximum drinking water fluoride MCL of 4 mg/L. Fluoride has a secondary standard of 2 mg/L to protect against dental fluorosis in children. EPA is currently reviewing the Fluoride Drinking Water Standard.

(Reference: <http://water.epa.gov/drink/contaminants/basicinformation/fluoride.cfm#four.>)

Fluoride can occur naturally in water. Many Texas communities add fluoride to their drinking water to promote dental health. Texas communities can determine whether or not to add fluoride. Four treatment methods are often suitable for removing fluoride from drinking water, including:

- Activated alumina filters
- Distillation
- Reverse osmosis
- Anion exchange

Texas violators of either the primary fluoride MCL are required by TCEQ to produce a FA, provide good water to children, as well as sample and provide public notification according the National Primary Drinking Water Regulations.

**b) Radionuclide (Rad):** The revised Rads Rule came into effect on December 8, 2003. Regulated Rads include combined radium (radium-226 and radium-228), gross alpha particle activity, combined uranium (U), and beta particle and photon radioactivity. For water systems with gross beta radioactivity greater than 50 pCi/L monitor for beta and photon emitters, no violators have been identified with analytical results received to date.

**c) Synthetic Organic Chemicals (SOC):** Please refer to Appendix I & J for Texas PWSs that have SOC MCL violations for FY 2014.

**d) Volatile Organic Chemicals (VOC):** TCEQ continues to implement the VOC rule in accordance with the National Primary Drinking Water Regulations. Please refer to Appendix I & J for Texas PWSs that have VOC MCL violations for FY 2014.

## **2) Total Coliform Rule (TCR)**

Please refer to Appendix I & J for Texas PWSs that have TCR MCL violations for FY 2014. TCR MCL and monitoring/reporting violations continue to be a significant portion of the total.

## **3) Ground Water Rule (GWR)**

Texas ground water systems began compliance with the GWR by the December 1, 2009 closing date. Ground water systems will either be 1) treating their water to at least 4-log virus removal/inactivation as approved by Texas, or 2) conduct triggered source water monitoring for the presence of a fecal indicator (i.e., *E. coli* for Texas) in response to positive sample results from monitoring under the Total Coliform Rule (TCR). In addition, the GWR now provides consistency with Subpart H systems for sanitary surveys. All community and non-community ground water systems will be on a three and five-year survey cycles, and all ground water systems will be surveyed for the same eight elements identified for Subpart H water systems. Corrective action is required for ground water systems, as directed by the TCEQ, for *E.coli* positive source water sample results or significant deficiencies.

## **4) Lead/Copper Rule (LCR)**

TCEQ provides technical assistance to systems with lead (Pb) or copper (Cu) action level exceedances (ALE). Technical assistance is generally provided by the TCEQ's FMT contractor. TCEQ downloads LCR sample data usually once a week from the laboratories accredited for lead and/or copper analysis for compliance. Please refer to Appendix I & J for Texas PWSs that have LCR ALEs for FY 2014.

## **5) Consumer Confidence Report Rule (CCR)**

CWSs must submit to TCEQ by July 1<sup>st</sup> annually: 1) a copy of the CCR document and 2) a certification that the CCR was correctly distributed to their customers by July 1. TCEQ continues to use UT Arlington contractor staff to assist with CCR program compliance and outreach, mostly by phone call and through e-mail assistance. Please refer to Appendix I & J for Texas PWSs that have CCR MCL violations for FY 2014.

## 6) Surface Water Treatment Rules (SWTR)

The SWTRs include:

- SWTR
- Interim Enhanced Surface Water Treatment Rule (IESWTR)
- Filter Backwash Recycling Rule (FBRR)
- Long Term 1 Enhanced Surface Water Treatment Rule (LT1)
- Long Term 2 Enhanced Surface Water Treatment Rule (LT2)

The general SWTRs' purpose is to improve public health protection through the control of microbial contaminants, particularly viruses, *Giardia lamblia*, and *Cryptosporidium*. The SWTRs:

- Apply to all PWSs using surface water or ground water under the direct influence of surface water (GWUDI), otherwise known as "Subpart H systems."
- Require all Subpart H systems to disinfect.
- Require Subpart H systems to filter unless specific filter avoidance criteria are met.
- Apply a treatment technique requirement for control of microbials.

Texas requires surface water systems and GWUDI systems to filter under SWTR. There are currently no known/reported uncovered finished water reservoirs in Texas. Reference the following EPA web-address for further SWTRs regulatory information:

<http://water.epa.gov/lawsregs/rulesregs/sdwa/swtr/>

IESWTR & LT1: Subpart H systems serving 10,000 or more people are required to comply with IESWTR provisions (e.g., turbidity standards, individual filter monitoring). Based on IESWTR individual filter monitoring requirements, TCEQ arranges for a mandatory Comprehensive Performance Evaluation (mCPE). Specifically, systems must conduct a mCPE if any individual filter has a measured turbidity level of greater than 2.0 NTU in two consecutive measurements taken 15 minutes apart in two consecutive months as required in the NPDWRs.

In FY 2014, Texas water systems continued to receive technical assistance through TCEQ's Special Performance Evaluation (SPE) program; a formal process for data verification. TCEQ also targets systems for assistance through TCEQ's Texas Optimization Program (TOP) Team.

Under the FBRR, Texas Subpart H water systems that practice conventional or direct filtration, and recycle spent filter backwash, thickener supernatant, or liquids from dewatering processes, must complete and submit the TCEQ Water Treatment Plant Recycling Practices Report (RPR), providing the required recycle notification. There are approximately 450 surface water plants in Texas that are subject to the FBRR. New Texas drinking water treatment plants are required to recycle at the beginning of treatment. FBRR records (required to be kept on file at the system) are reviewed by the FOD investigators during CCIs.

The goal of the LT2 is to reduce the risk of disease caused by *Cryptosporidium* and other microorganisms by identifying the systems with the greatest potential for source water contamination. LT2 provides increased protection from the protozoan *Cryptosporidium* found in surface water. TCEQ systems are all in Bin 1 or Bin 2 with none in Bin 3 or Bin 4. There are 24 Subpart H PWSs sampling for LT2, some using membranes with 0.1 NTU or less turbidity results.

Please refer to Appendix I & J for Texas PWSs with SWTR & Interim Enhanced Surface Water Treatment Rule violations.

## **7) Sanitary Surveys**

*(NOTE: FY 2014 data has not been provided yet from EPA Headquarters and expected May 2015. Once received, the report will reflect the updated respective data.)*

The FY 2013 Texas SDW-1a Sanitary Survey (a.k.a. TCEQ Comprehensive Compliance Investigations) measure is reported as 95%, as shown in Appendix H. This exceeds the SDW-1a 91% EPA target.

SDW1a is derived from SDWIS/FED each year in July. TCEQ should continue to ensure sanitary survey data is entered and reported comprehensively to SDWIS/FED. SDWIS/FED under reporting of the TCEQ sanitary survey rate has been a challenge for many years.

The FY 2013 measure is for the three calendar year period of 2010, 2011, and 2012. FY 2013 SDW-1a was defined as the “Percent of CWSs that have undergone a sanitary survey within three years of their last sanitary survey as required under the Interim Enhanced and Long-Term 1 Surface Water Treatment Rules.” The FY 2014 SDW-01a measure, however, has changed to include all CWSs. The new FY 2014 SDW-01a is now defined as: Percent of CWSs that have undergone a sanitary survey within the last three years (five years for outstanding performers or those groundwater systems approved by the primacy agency to provide 4-log treatment of viruses).

The TCEQ Regional Offices goal is to complete CCIs every three years for CWSs and every five years for NCWSs. TCEQ continues to use an Enforcement Initiation Criteria category system as defined below:

- Category “A” violations rate automatic enforcement activities;
- Category “B” violations rate enforcement if a system has two deficiencies in a five year period; and
- Category “C” violations trigger enforcement if a system has three deficiencies in a five year period.

Depending on the severity of the deficiency, systems have a range of response times. The most critical deficiencies must be corrected within 24-hours and the least critical must be corrected within 180 days, unless some sort of approval (i.e., for construction) is involved.

## **8) Disinfectants and Disinfection Byproducts Rules 1 & 2 (DBP1 & DBP2)**

DBP2 provides Texas public drinking water customers more equal protective requirements to mitigate disinfection byproducts’ long-term health risks that may highlight issues in consecutive systems. As of March 2014, 726 PWSs began DBP2 monitoring. Please refer to Appendix I & J for Texas PWSs that have DBP1 and DBP2 violations for FY 2014. By the end of calendar year 2014, all PWSs in Texas should have completed at least one period of Total Trihalomethanes (TTHM) and five Haloacetic Acids (HAA5) monitoring that includes DBP results during the peak DBP formation month. EPA anticipates that there will be water systems that no longer qualify for reduced monitoring and these PWSs will have to begin increased monitoring beginning in Quarter 4, 2014. In addition, some water systems that began monitoring in 2012 or 2013 could now have sufficient data to qualify for reduced monitoring. Texas’ future workload may include adjusting TTHM and HAA5 monitoring schedules based on data already received. The DBP2 also requires that PWSs complete an Operational Evaluation Level (OEL) report to evaluate and find reasons why the PWS has elevated levels of TTHMs and HAA5s. PWSs must complete and submit this report to TCEQ no later than 90 days after being notified of the analytical result that causes the exceedance of the OEL for each compliance period when any compliance location exceeds the OEL formula as specified by the federal

regulations. The OEL report is intended to assist PWSs with an early warning that their TTHM and HAA5 levels may exceed the MCL in the next monitoring period. This OEL requirement is different from PWSs normal course of business and EPA anticipates that Texas will have an increased workload to address PWSs that are noncompliant with the OEL requirements. Finally, EPA Region 6 Houston Laboratory had noted that several Texas laboratories were having issues with chlorite reporting limits in the past but as of FY 2014, they have been resolved.

## **9) Lab Accreditation Program**

The authority to create a laboratory accreditation program in Texas has been established by the Texas Water Code, Chapter 5, Subchapter B. Texas lab accreditation is based on an environmental testing laboratory's conformance to the most current standards adopted by the National Environmental Laboratory Accreditation Program. TCEQ Laboratory Inspections (that analyze samples for SDWA compliance) are performed and controlled according to Title 30 Texas Administrative Code Chapter 25.

- For further TCEQ lab accreditations information, reference the web-address: [http://www.tceq.texas.gov/field/qa/env\\_lab\\_accreditation.html#rules](http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html#rules).
- A list of laboratories accredited by the State of Texas to conduct environmental analysis, including Drinking Water, can be found here: [http://www.tceq.state.tx.us/assets/public/compliance/compliance\\_support/qa/txnelap\\_lab\\_list.pdf](http://www.tceq.state.tx.us/assets/public/compliance/compliance_support/qa/txnelap_lab_list.pdf) or by contacting TCEQ at (512) 239-3518.

## **V. D. Data Management**

In FY 2014, TCEQ has continued to report the Texas SDWA data and submitted to SDWIS/FED in a timely manner. However, there are inventory completeness issues that need to be addressed, most significantly the locational data for consecutive connections. TCEQ is working to collect these locational data for purchased water entry points through the Sample Collection ANTEA Contractor. TCEQ's reporting of action items in the last year reflects that all violations (Tiers 1-3) are being reported, but being reported late by one or more quarters. To help resolve the issue, TCEQ is now implementing a new reporting process that will show a decrease in late reporting in 2015. TCEQ continues to move toward full implementation of the compliance decision support modules in SDWIS/STATE as well as development of additional tools to support SDWA rules, enabling quick and accurate processing of both violation determinations and those actions that appropriately address violations. TCEQ continues to direct resources toward the installation, testing, and production of SDWIS/STATE and its compliance modules, as well as Drinking Water Watch. EPA commends TCEQ for pursuing high standards in SDWA federal reporting with timeliness, completeness, as well as the accuracy of compliance determinations and inventory data.

TCEQ has worked diligently to address data errors, assign assets, and install processes that will show true, timely data snapshots each quarter of their implementation activities under the SDWA. As a result of these efforts, the ETT reports will reflect more accurate data.

In 2014, TCEQ upgraded to SDWIS/STATE 3.21 to stay current with the latest changes in SDWA rules and in preparation for the Safe Drinking Water Information System Primacy Agency (SDWIS Prime) database. After thorough testing and validation has occurred, TCEQ will plan for SDWIS Prime implementation. EPA has delayed implementation of SDWIS Prime until fourth quarter of 2016 (not 2015 as EPA HQ projects it will be ready). The WSD will continue to use as primary enterprise databases, 1) SDWIS/STATE for SDWA implementation, PWS inventory, compliance determination, and sanitary surveys and, 2) the Consolidated Compliance and Enforcement Data System (CCEDS) for enforcement and detailed information relating to sanitary surveys.

## V. D. Enforcement Program

Under the EPA's Enforcement Response Policy and using EPA's ETT formula (i.e., score greater than or equal to 11), the TCEQ's WSD identifies PWSs weekly that are considered priority systems for an enforcement response with the goal of returning those systems to compliance as quickly as possible. TCEQ created and continues to use its own ETT algorithm to identify and evaluate these systems on a weekly basis, based on the ETT formula provided in EPA's guidance.

Texas produces its own ETT list daily based on current Texas SDWIS/STATE data. As of September 30, 2014, 299 systems were on the Texas-produced ETT list with a score at or above 11. In addition to creating its own ETT, the TCEQ's Public Drinking Water Section has reorganized to 1) increase efficiencies to 1) ensure timely compliance monitoring and compliance determination for chemical and microbiological standards, and 2) formal enforcement action for public water systems that exceed compliance trigger levels agreed upon by TCEQ and EPA for approximately 7,000 public water systems that provide drinking water to approximately 25,000,000 Texas citizens.

Once the ETT report has been generated (on weekly basis), the report is assigned to TCEQ staff to analyze each system's compliance and inventory data to ensure the system meets the 11 points or greater criteria. If a PWS meets the criteria for formal enforcement action as outlined in EPA's ERP, the TCEQ's WSD refers the system to the TCEQ's ED on a weekly basis.

As of September 30, 2014, TCEQ's WSD referred 404 systems to the TCEQ's ED. TCEQ's WSD plans to continue to initiate enforcement actions weekly on all eligible systems.

The FY 2014 Enforcement Program Review was conducted by the EPA Region 6 Drinking Water Enforcement Program on Wednesday, March 11, 2015, at TCEQ. Separate report of the review will be finalized by Medhi Taheri, the Texas Enforcement Coordinator. Please contact Mr. Taheri for more information as he can be contacted at [taheri.mehdi@epa.gov](mailto:taheri.mehdi@epa.gov) or 214.665.2298.

## VI. 1996 SDWA Amendments Initiatives

### VI. A. Source Water Protection (SWP)

TCEQ did not achieve the FY 2014 SWP Performance Measures SP 4(a) and SP 4(b) illustrated in Appendix H and summarized in the below table.

**FY 2014 SWP Performance Measure Table**

Strategic Targets	EPA Target	TCEQ Results
SP 4(a)	40%	36%
SP 4(b)	60%	58%

TCEQ is implementing several solutions that should raise implementation efforts to increase the number of Texas community PWSs and population served where risk to public health is minimized through source water protection. In FY 2014, TCEQ increased funding to their SWP contract to include twice as many systems as in FY 2013. In addition TCEQ has revised their SWP definition to include water systems that have "natural" geological protection and is working with systems that have SWP reports, but have not yet implemented best management practices.



## **VI. B. Capacity Development**

Under the TCEQ Capacity Development Program, assistance is provided to mitigate drought and water shortage related issues. One current extreme drought related challenge is in the Wichita Falls area. The Capacity Development Program coordinates with TWICC and facilitates drought workshops and technical assistance.

TCEQ provided the Capacity Development program status by submitting the *Texas FY 2014 Annual Report to EPA: Public Water System Capacity Development Program*, submitted December 23, 2014. We appreciate TCEQ's commitment having submitted the report within the required deadline of within 90 days of the end of the federal FY. The annual report provided information that addresses the SDWA capacity development withholding provisions. EPA Region 6 determined that the report's content demonstrates that TCEQ is implementing a strategy to assist public water systems in acquiring and maintaining technical, managerial, and financial capacity. EPA Region 6 is satisfied with the progress of TCEQ's Capacity Development program. The FY 2015 annual report is due on/by January 1, 2016. Also in FY 2014, TCEQ provided the required associated Governor's report on the state's capacity development program in September as required on a triennial basis. EPA appreciates TCEQ's commitment having also submitted this report within the required timeframe.

Section 1420(a) of the SDWA requires States to develop legal authority or other means to ensure that new CWSs and new NTNC PWSs have financial, managerial, and technical (FMT) capacity with respect to each National Primary Drinking Water Regulation. Section 1452(a)(1)(G)(i) requires EPA to withhold 20% of a State's DWSRF capitalization grant unless the State meets the capacity authority requirements under Section 1420(a).

## **VI. C. Operator Certification**

EPA received the *FY 2014 Annual Operator Licensing Certification Report* from TCEQ October 8, 2014. This annual report documents how TCEQ is implementing its Operator Certification Program to meet the EPA requirements described in the Guideline for the Certification and Recertification of CWS and NTNC PWS operators, dated February, 1999. EPA has determined that TCEQ is implementing the Texas Operator Certification Program in accordance with the requirements of the Guidelines. The FY 2014 TCEQ Operator Certification annual report is due annually to EPA by September 1st. EPA received the respective Attorney General Certification signature page that is required to support the annual report on February 25, 2015. Further information on TCEQ water operator licensing requirements is available on the following web-address: <http://www.tceq.texas.gov/licensing/licenses/waterlic/>.

## **VI. D. Unregulated Contaminant Monitoring Rule – Cycle 3 (UCMR3)**

The proposed third Unregulated Contaminant Monitoring Regulation (UCMR 3) was published in the Federal Register on March 3, 2012. Together, EPA, States, laboratories, and public water systems (PWSs) are engaged at various levels with key roles in UCMR 3. Further information is available on the following web-address: <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/index.cfm>

**UCMR 3 Highlights:** Sampling started in 2013 and will finish at the calendar year end 2015. The monitoring includes two viruses and 28 unregulated chemical contaminants. TCEQ was not part of the sample collection or data management for UCMR3. For the State of Texas, UCMR3 sampling logistics is being handled by EPA's contractor (Great Lake Environment Center- GLEC). All Texas

water systems have been notified by GLEC about their sampling schedule. Assistance can be provided by the UCMR Message Center at 800-949-1581 or [UCMR3@glec.com](mailto:UCMR3@glec.com).

All PWSs serving more than 10,000 people, and a representative sample of 800 PWSs serving 10,000 or fewer people, are required to conduct Assessment Monitoring (List 1) for 28 chemicals during a 12-month period: January 2013 through December 2015. Nationally, 800 selected PWSs serving 1,000 or fewer people are required to conduct Pre-Screen Testing (List 3) for two viruses during a 12-month period during January 2013 through December 2015. Further information is available on the following web-address: <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/methods.cfm>

The goal of the UCMR, under the SDWA, is to obtain reliable data concerning the occurrence of unregulated contaminants in drinking water as one of the key steps in the EPA's determination of whether or not to regulate them. Since the EPA and the States and Tribes are partners in the implementation of any future regulations associated with these contaminants, we have a joint and mutual interest in obtaining the best data possible through the UCMR monitoring program.

## **VI. E. EPA Drinking Water Grants**

### **1) PWSS grant (PPG)**

- a. The FFY2015 PWSS allotment has been finalized for \$6,637,000 and TCEQ's PPG award is in process. (The FFY 2014 allotment was \$6,617,000 and the FFY13 allotment was \$6,351,000.)
- b. In FFY 2014, TCEQ was awarded their allotment \$1,664,215 on 01/08/2014 and \$4,952,785 on 04/22/2014.
- c. As of 02/10/2015, the PPG (BG-996627-14) had \$3,075,789, of which \$1,409 is from the 04/22/2014 award.

### **2) DWSRF Set-asides – Unliquidated Obligations (ULOs) – as of February 27, 2014**

DWSRF ULOs continue to be an issue due to the federal budget oversight. Therefore, TCEQ is encouraged to draw down funds for expenses in a timely manner. EPA's goal is to have no more than two open capitalization grants at a time.

In FFY 2014, TCEQ was authorized to use approximately \$1.5 million additional funds from the FFY13 grant for the 15% set-aside. TCEQ also has applied for an additional \$1.5 million from the FFY 14 allotment last year. The recently finalized DWSRF FFY2015 allotment for Texas is \$63,953,000.

### **3) Quality Assurance (QA) Requirements**

- a. QMP (QTRAK #14-064): Expired 01/02/2015. Replaced by QMP (QTRAK #15-059): Expires 01/01/2016.
- b. QAPP (QTRAK # 14-038): Expires 11/4/2016. EPA approved the revised QAPP on Thursday, April 23, 2015, and the award is in process.

QA plans are due in to EPA *at least 60 days prior* to expiration of the previously approved plan, to allow for review and approval. QAPPs can be approved for up to 4 years. The latest QAPP was approved for three years.



#### **4) State Grant Workplans and Progress Reports - (GPI 11-03)**

For all State Categorical Program Grants awarded on or after October 1, 2012, work plans and associated progress reports must prominently display three Essential Elements:

- Essential Element 1 – Strategic Plan Goal: Protecting America’s Waters
- Essential Element 2 – Strategic Plan Objective: Protecting Human Health
- Essential Element 3 – Work plan Commitments plus time frame

The EPA Regional office will be required to electronically post work plans and progress reports in the application established for this policy [Grants Policy Issuance (GPI) 11-03].

EPA Region 6 will work with TCEQ and other state PWSS programs, once it is determined how these new requirements will affect all PWSS workplans, including those states with PPGs. As of February 2015, the regions have not received guidance on final workplan requirements, etc.

#### **5) Advanced Monitoring Plan for PWSS Grants**

As was discussed by Javier Ballí during the Drinking Water Five-State meeting on January 29, 2015, advanced monitoring will be conducted on the TCEQ PWSS grant at the time of the annual DWSRF oversight review in FFY 2017.

As part of the advanced monitoring review, a financial review will also be conducted. A financial team (which may or may not include your PO) will review one-three cash draws. Time keeping processes and associated time cards will also be included in the review.

### **VII. Other Initiatives**

#### **VII. A. Staffing**

TCEQ employs multiple contracts through State universities, agencies, and outside contractors to perform projects from sampling to technical assistance. To compensate for the continuing TCEQ FTE cap, TCEQ outsources PWSS program activities through the University of Texas at Arlington.

Under the TCEQ Capacity Development program, TCEQ applies DWSRF 2% small system technical assistance set-aside funds to perform Financial, Managerial, and Technical (FMT) capacity-assessments and uses an FMT Texas Rural Water Association (TRWA) contract to provide small system technical assistance site visits. TCEQ additionally has a continued ANTEA

Group sample collection contract for Texas PWS chemical sampling that is unrelated to the 2% DWSRF set-asides.

#### **VII. B. Texas Area wide Optimization Program (AWOP)**

The Texas Optimization Program (TOP) AWOP goal is to improve the performance of existing surface water treatment plants and distribution systems without major capital improvements. To produce the safest water possible, TOP Team members evaluate performance and identify the factors that might be limiting plant performance. The evaluation technique used most often at public water systems is the Comprehensive Performance Evaluation (CPE). The evaluation includes an assessment of:

- Plant design
- Operational procedures
- Maintenance practices
- Administrative policies

In addition to performing evaluations, the TOP provides technical assistance to PWS through Targeted Performance Improvement (TPI). This technical assistance may be provided for surface water treatment plants, ground water plants, distribution systems, and cross-connection control programs.

The TOP develops and provides instruction on surface water treatment and disinfection in the form of directed assistance modules (DAM). New rule and drinking water concept training are provided by the TOP to OCE inspectors, water operators and water managers. . The TOP also trains OCE and WSD staff on Special Performance Evaluations. The TOP helps surface water treatment plants do the best job they can of removing potential pathogens (disease-causing microorganisms) from the lake or river water that they use to produce drinking water. A system that meets the TOP Recognition criteria ensures this increased public health protection and the TCEQ recognizes them for this significant achievement. Currently 15 water treatment plants are participating in the TOP Recognition Program out of approximately 430 surface water treatment plants in Texas. Six of these water treatment plants have met the extremely stringent recognition criteria continuously for more than five years.

TCEQ accomplished the following milestones/actions during FY 2014:

- Rules for Desalination Technologies - TCEQ worked with stakeholders to develop proposed rules for approving desalination technology that are currently approved through the exception process. With the exception of treatment for pathogen control and the treatment of seawater (both of which have unique challenges), the stakeholder process developed a path for PWSs and their design engineers to use rule-based criteria to demonstrate that the desalination process would be effective, reliable and safe. With that goal in mind during the stakeholder meetings, TCEQ staff presented a discussion outline that included plant design, engineering report, capacity requirements, operator licensing, operating records and reports, and instrument calibration. As a result of the stakeholder meetings, TCEQ staff received sufficient feedback supporting the development of the proposed rule for desalination to meet the majority of the regulated community's concerns while remaining protective of public health.
- Direct Potable Reuse - TCEQ has had the opportunity to work with drought-affected systems to develop site-specific standards for direct potable reuse. All drinking water treatment facilities have engineering designs reviewed by TCEQ to ensure the design meets the minimum standards in TCEQ's Public Drinking Water regulations found in Title 30 Texas Administrative Code (TAC) Chapter 290. Direct potable reuse projects, which use innovative technologies, do not currently have standards defined in TCEQ rules and are reviewed as rule exceptions. The use of an innovative technology to treat non-standard source water is reviewed on a case-by-case basis and must demonstrate the design and operation of the facility will produce water that meets federal and state water quality regulations. Direct potable reuse facilities undergo a stringent review process including a full-scale or pilot-scale study or full-scale verification test to determine the operating conditions for the facility to assure the facility will meet the drinking water standards and that public health is protected during operation.

- To be able to approve direct potable reuse projects for use, TCEQ has had to invest substantial time in research of pathogen and contaminant measurement, treatment, and plant operations. Each project has been unique with its own challenges, thus TCEQ has learned more with each project it has reviewed.
- During FY2014, TCEQ formed a project team with the City of Wichita Falls to assist them in retrofitting their existing Cypress Water Treatment Plant to treat secondary wastewater effluent to blend with their dwindling surface water supplies. TCEQ spent time on site training city staff, troubleshooting equipment, reviewing data onsite as well as providing expedited review of engineering documents, standard operating procedures and monitoring plan. The retrofit was conditionally approved for direct potable reuse in July 2014.
- Review of Engineering Plans and Specifications- in FY14, TCEQ reviewed approximately 2,240 engineering submittals for construction approval. The submittals are for wells, lines, pressure maintenance, and storage and treatment facilities. The engineering plans and specifications are reviewed for compliance with TCEQ rules and regulations.

#### **VII. C. The Texas Water Infrastructure Coordination Committee (TWICC)**

TWICC involves a collaborative effort by government agencies and technical assistance organizations to identify Texas water infrastructure and compliance issues. TWICC promotes an efficient process for affordable, sustainable and innovative funding strategies for water infrastructure projects that protect public health.

(Reference: <http://www.twicc.org/>)

#### **VII. D. Texas Drought Program**

Drought has become a frequent and inevitable factor in the Texas climate. TCEQ utilizes significant resources to manage drought issues. As of March 20, 2015, Texas reported 1,168 PWS that had implemented water restrictions. Approximately 72 Texas water systems required mandatory no outside watering. One current extreme drought related challenge is in the Wichita Falls area. For further information, the Texas drought information website is:

<http://www.tceq.state.tx.us/response/drought/index.html/#respond>

The TCEQ drought program includes the following tasks:

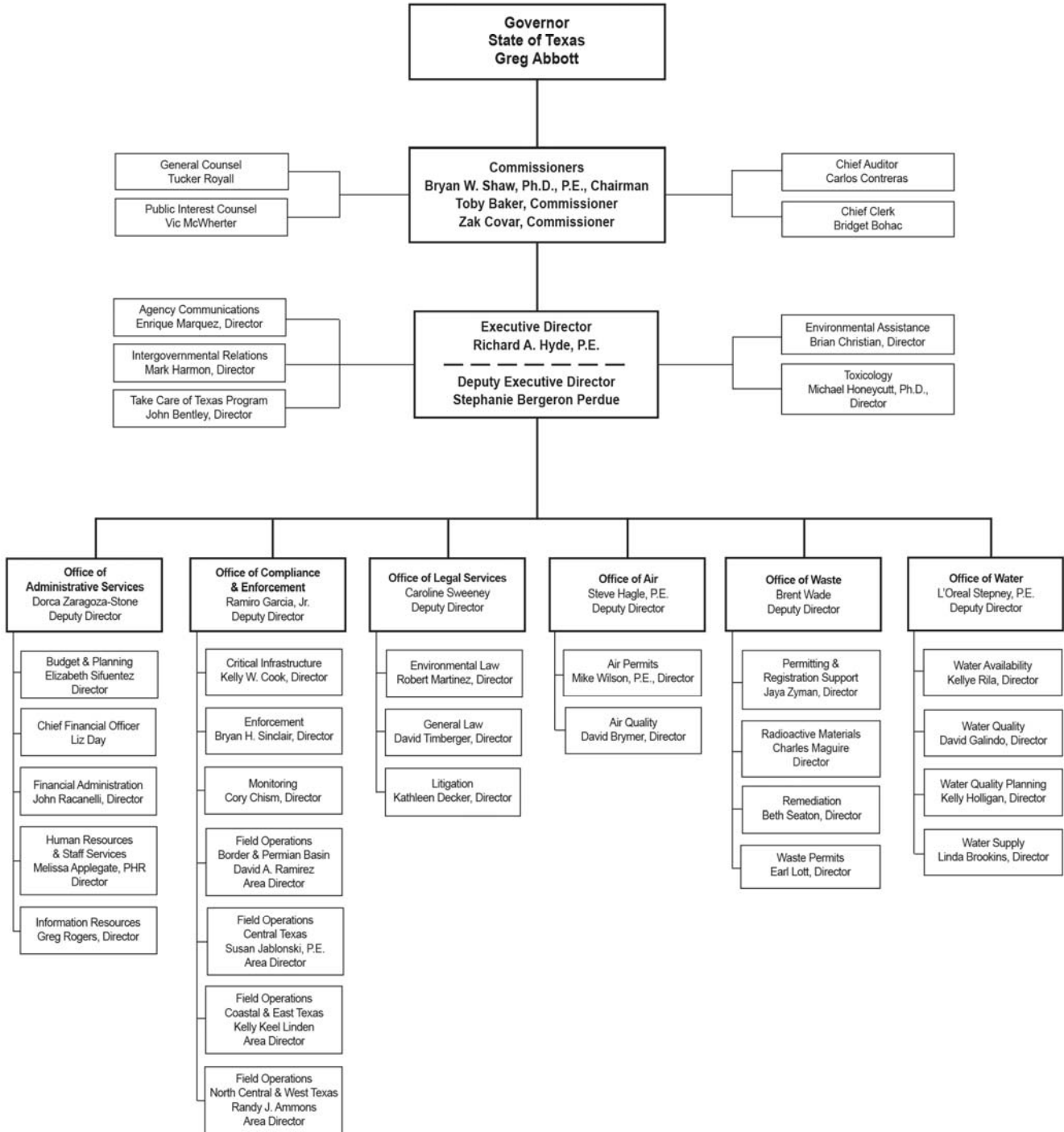
- Consults with PWSs regarding drought implementation and other water shortage issues
- Tracks PWSs under water use restrictions
- Manages the drought information hot line during business hours to answer questions from the public: 800-447-2827
- Conducts weekly drought mitigation meetings

TCEQ is working with TWICC funders, including the Texas Department of Agriculture (TDA) to pursue drought mitigation funding assistance. TCEQ is also working with the TWDB on DWSRF and other PWS drought-related grant and loan funding assistance, including interconnections, new wells, consolidation, etc. Under the TCEQ Capacity Development Program, drought related workshops and technical assistance (TA) are provided.

# APPENDIX A

## TCEQ ORGANIZATION

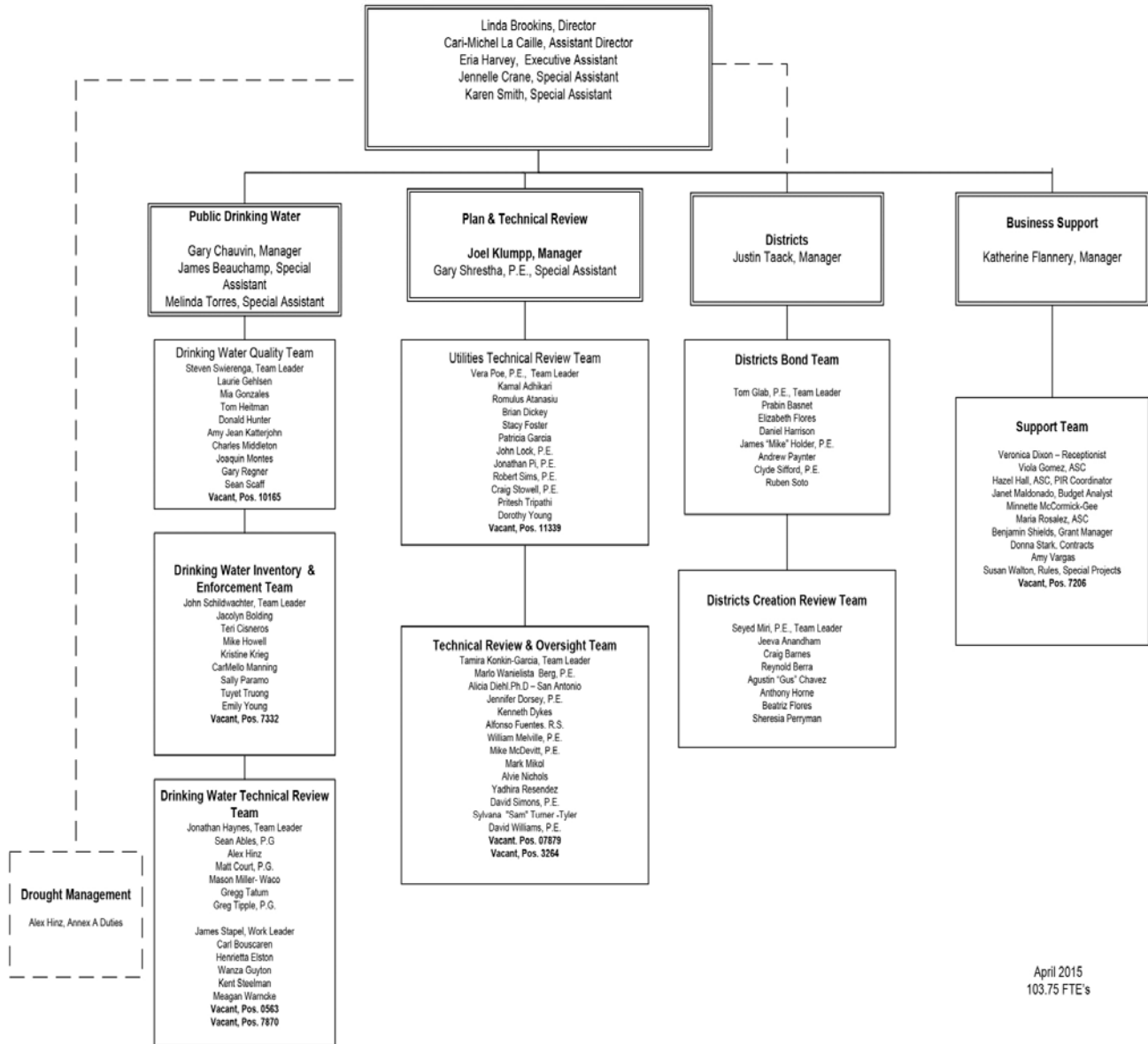
April 1, 2015



# APPENDIX B



## OFFICE OF WATER Water Supply Division Fiscal Year 2015



## APPENDIX C

### Public Drinking Water Section



**Public Drinking Water**  
Gary Chauvin, Manager  
James Beauchamp, Special Assistant  
Melinda Torres, Special Assistant (PDW  
Homeland Security)

**Drinking Water Quality Team (10)**  
**Steven Swierenga, Team Leader**

Laurie Gehlsen  
Mia Gonzales  
Tom Heitman  
Donald Hunter  
Amy Jean Katterjohn  
Charlie Middleton  
Joaquin Montes  
Gary Regner  
Sean Scaff

**Drinking Water Technical Review Team (15)**  
**Jonathan Haynes, Team Leader**

Sean Ables, P.G.  
Matt Court, P.G.  
Alex Hinz  
Mason Miller  
Gregg Tatum  
Greg Tipple, P.G.  
**James Stapel, Work Leac**  
Carl Bouscaren  
Henrietta Elston  
Wanza Guyton  
Kent Steelman  
Meagan Warncke  
Vacant  
Vacant

**Drinking Water Inventory and Enforcement Team 10)**  
**John Schildwachter, Team Leader**

Jaci Bolding  
Teri Cisneros  
Mike Howell  
Kristine Krieg  
CarlMello Manning  
Sally Paramo  
Tuyet Truong  
Emily Young  
Vacant

(4/16/2015)  
Total FTEs = 38

## APPENDIX D

### TCEQ Water Supply Division Contact Table

<b>MAIN LINE: 512-239-4691</b> <b>FAX: 239-2214</b> <b>Consumer Assistance Hot Line: 512-239-6100</b>				
<b>Director</b>	Linda Brookins	MC 154	239-4625	FAX: 239-6145
<b>Assistant Director</b>	Cari-Michel La Caille	MC 154	239-6479	
Executive Assistant	Eria Harvey	MC 154	239-6104	
Special Assistant	Jennell Crane	MC 154	239-2065	
Special Assistant	Karen Smith	MC 154	239-0171	
Special Projects	Susan Walton	MC 154	239-6147	
Technical Specialist	Vacant	MC 154	239-4691	
<b>Public Drinking Water Section</b>		MC 155	239-4691	FAX: 239-0030
Manager	Gary Chauvin	MC 155	239-1687	
Drinking Water Quality	Steven Swierenga	MC 155	239-6611	
Drinking Water Inventory Enforcement Team	John Schildwachter	MC 155	239-2355	
Drinking Water Technical Review Team	Jonathan Haynes	MC 155	239-4662	
<b>Districts Section</b>		MC 153	239-4691	FAX: 239-6972
Manager	Justin Taack	MC 153	239-1122	
Districts Bond	Tom Glab, P.E.	MC 152	239-4958	
Districts Creation Review	Seyed Miri, P.E.	MC 152	239-3139	FAX: 239-6190
<b>Plans and Technical Review Section</b>		MC 159	239-4691	
Manager	Joel Klumpp	MC 159	239-4453	
Utilities Technical Review	Vera Poe, P.E.	MC 159	239-1298	
Technical Review and Oversight	Tamira Konkin-Garcia	MC 159	239-4453	
<b>Business Support Section</b>		MC 157	239-4691	FAX: 239-2214
Manager	Katherine Flannery	MC 157	239-6116	
Budget Analyst	Janet Maldonado	MC 157	239-4047	
Grant Manager for DWSRF and PPG-PWSS	Benjamin Shields	MC 157	239-5054	
Contract Support	Donna Stark	MC 157	239-0261	
Administrative Assistant/Public Information Requests	Hazel Hall	MC 157	239-4310	
Administrative Assistant	Viola Gomez	MC 157	239-6173	
Administrative Assistant	Liz Nichols	MC 157	239-2529	

## APPENDIX E

### Primacy Requirements (40 CFR 142, Subpart B)

- The State must have regulations for contaminants regulated by the national primary drinking water regulations (NPDWRs) that are no less stringent than the regulations promulgated by EPA. States have up to 2 years to develop regulations after new regulations are released by EPA.
- The State must have adopted and be implementing procedures for the enforcement of State regulations.
- The State must maintain an inventory of public water systems in the State.
- The State must have a program to conduct sanitary surveys of the systems in the State.
- The State must have a program to certify laboratories that will analyze water samples required by the regulations.
- The State must have a laboratory that will serve as the State's "principal" lab that is certified by EPA.
- The State must have a program to ensure that new, or modified, systems will be capable of complying with State primary drinking water regulations.
- The State must have adequate enforcement authority to compel water systems to comply with NPDWRs, including:
  - Authority to sue in court;
  - Right to enter and inspect water system facilities;
  - Authority to require systems to keep records and release them to the State;
  - Authority to require systems to notify the public of any system violation of the State requirements; and
  - Authority to assess civil or criminal penalties for violations of the State Primary Drinking Water Regulations and Public Notification requirements.
- The State must have adequate recordkeeping and reporting requirements.
- The State must have adequate variance and exemption requirements as stringent as EPA's, if the State chooses to allow variances or exemptions.
- The State must have an adequate plan to provide for safe drinking water in emergencies like a natural disaster.
- The State must have adopted authority to assess administrative penalties for violations of their approved primacy program
- The state must review plans and specification for new or modified water system facilities

#### Applicable Law, Regulations and Guidance

- Safe Drinking Water Act, 1974, as amended in 1986 and 1996
- Primacy Regulations 40CFR142, Subpart B, 1976, as amended in 1986
- State Programs Priority Guidance (1992)
- Revisions to Primacy Requirements (1998), 63 FR 23362 to be codified at 40CFR142



## APPENDIX F

### TCEQ Primacy Table

SDWA Rule (Deadline does not include two- year extension)	DRAFT PRIMACY REVISION APPLICATION OR PROGRAM UPDATE		STATE ADOPTION		FINAL PRIMACY REVISION APPLICATION OR PROGRAM	
	<i>Stat</i>	<i>Dat</i>	<i>Statu</i>	<i>Dat</i>	<i>Statu</i>	<i>Dat</i>
New PWS Def. (Deadline: 4/28/02)	Received	1-Apr-00	Adopted	1-Feb-99	Approved	1-Aug-01
Administrative Penalty Authority	Received	1-Apr-00	Adopted	1-Sep-97	Approved	1-Aug-01
CCR Rule (Deadline: 8/19/02)	Received	1-Aug-00	Adopted	1-Aug-00	Approved	1-Aug-01
IESWTR (Deadline: 12/16/02)	Received	1-Mar-00	Adopted	1-Sep-00	Approved	1-Aug-01
DBPR (Deadline: 12/16/02)	Received	1-Mar-00	Adopted	1-Sep-00	Approved	18-Aug-01
PN Rule (Deadline: 5/6/04)	Received	1-Oct-03	Adopted	21-Jan-04	Approved	14-Mar-13
LCR MR (Deadline: 1/14/04)	Received	1-Oct-03	Adopted	21-Jan-04	Approved	28-Dec-06
Radionuclides Rule (Deadline: 12/7/04)	Received	5-Aug-04	Adopted	1-Dec-04	Approved	12-Sep-05
Arsenic Rule (Deadline: 1/21/05)	Received	5-Aug-04	Adopted	1-Dec-04	Approved	12-Sep-05
Filter Backwash Rule (Deadline: 6/8/05)	Received	4-May-04	Adopted	21-Jan-04	Approved	28-Dec-06
LT1 Rule (Deadline: 1/14/06)	Received	4-May-04	Adopted	21-Jan-04	Approved	28-Dec-06
Variances and Exemptions Rule	Received	11-Oct-05	Adopted	2-Apr-02	TBD	TBD
Op Cert Program (Deadline: 9/30/02)	NA	NA	NA	NA	Approved	1-Jan-01
Op Cert Expense Reimbursement Grant	NA	NA	NA	NA	Approved	25-Sep-02
Stage 2 DBPR (Deadline: 1/4/2010)	Received	Jun-09	Adopted	8-Jan-10	Approved	14-Mar-13
LT 2 IESWTR Rule (Deadline: 1/4/2010)	Received	Jun-09	Adopted	8-Jan-10	Approved	14-Mar-13
GWR (Deadline: 10/11/08)	Received	Jun-09	Adopted	8-Jan-10	Projected	28-Dec-16
LCR/STR (Deadline: 9/10/2012)	Received	Jun-11	Adopted	26-Sep-11	Approved	18-Jul-12

## APPENDIX G

**FY 2014 SDWIS-Fed Performance Activity Measures (PAM) Table**

Code	Measure	EPA Average Goals				EPA Region 6	Texas (TCEQ) Result	Status
			FY	TARGET				
<b>2.1.1</b>	Percentage of the population served by community water systems that receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection					90.0%	92.8%	Measure Met
			11	87.0%				
			12	85.0%				
			13	85.0%				
			<b>14</b>	<b>85.0%</b>				
<b>SP-1</b>	Percentage of the community water systems that provide drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection					85.9%	90.8%	Measure Met
			11	85.0%				
			12	85.0%				
			13	85.0%				
			<b>14</b>	<b>89.0%</b>				
<b>SP-2</b>	Percentage of "person months" during which community water systems provide drinking water that meets all applicable health-based drinking water standards					95.3%	96.5%	Measure Met
			11	94.0%				
			12	94.0%				
			13	94.0%				
			<b>14</b>	<b>94.0%</b>				

The Government Performance and Results Act (GPRA) pivot tables can be found at <http://water.epa.gov/scitech/datait/databases/drink/sdwisfed/pivottables.cfm>. This data comes from the federal database of record, SDWIS/FED. The abstract is from the federal database of record compiled from the primacy agencies' uploads.

## APPENDIX H

**FY 2014 Source Water Protection Performance Measure Table**

<b>Strategic Targets</b>	<b>Measure</b>	<b>EPA R6 Target</b>	<b>TCEQ Results</b>	<b>Status</b>
SP 4(a)	Percent of community water systems where risk to public health is minimized through source water protection.	40%	36%	Below Target
SP 4(b)	Percent of the population served by community water systems where risk to public health is minimized by source water protection	60%	58%	Below Target

**FY 2013 Sanitary Survey Performance Measure Table End-of-Year Results:**

<b>Code</b>	<b>Measure</b>	<b>EPA Target</b>	<b>TCEQ Result</b>	<b>Status</b>
*SDW-1a	Percent of CWSs that have undergone a sanitary survey within three years of their last sanitary survey as required under the Interim Enhanced and Long-Term 1 Surface water Treatment Rules.	91%	95%	On Target

\*The SDW-1a Sanitary Survey measure is derived from SDWIS-Fed each year.

NOTE: The SDW-1a Sanitary Survey measure will change for FY 2014 to: “Percent of CWSs that have undergone a sanitary survey within the last three years (five years for outstanding performers or those groundwater systems approved by the primacy to provide 4-log treatment of viruses)” as shown on the next two pages. *(FY 2014 data has not been provided yet from EPA Headquarters and once received, the report will reflect the respective data.)*

# APPENDIX I

## FY 2014 Texas Systems MCL Violation Table

(Small ≤ 3,300; Medium 3,301 - 10,000; Large > 10,000)

(Data obtained from FY 2014 SDWIS/Fed; 10/01/2013 - 09/30/2014 and pulled 2/3/2015)

			Community			Non-Transient Non-Community			Transient Non-Community		
VIO	RULE	SubRULE	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
MCL	Chems	Arsenic	68	7	2	9			1		
		IOC	34	3	3	8					
		Nitrates	44	2	1	9			22		
		VOC	1								
	Radiological (Rads)		99	8	2				2		
	Disinfection By-Products Rule	Stg1	66	23		3					
		Stg2	42	7	12	3					
	Surface Water Treatment Rules	Long Term 1	2	5	5						
		Long Term 2			1						
		SWTR	2		1						
	Lead and Copper Rule		51	5	2	29			1		
	Ground Water Rule		1			1			2		
	Total Coliform Rule		48	18	20	12	1		39		
MR	Chems	Arsenic	60	3	2	10					
		IOC	587	19	18	104			4		
		Nitrates	125	7	4	26			76		
		SOC	1241	88	90	358			52		
		VOC	441	63	42	63					
	Radiological (Rads)		141	3	15						
	Disinfection By-Products Rule	Stg1	630	43	22	162			9		
		Stg2	10		4	2					
	Surface Water Treatment Rules	Long Term 1	17	6	1				2		
		SWTR	1	2							
	Lead and Copper Rule		1093	279	144	419	5		9		
	Ground Water Rule		281	60	31	65			212		
	Total Coliform Rule		256	19	10	99			266	1	
	Consumer Notification	CCR	580	46	30	2			2		
		PN	780	81	57	179	1		436	1	

## APPENDIX J

### FY 2014 Texas MCL Violations Table

(Small ≤ 3,300; Medium 3,301 - 10,000; Large > 10,000)

(Data obtained from FY 2014 SDWIS/Fed; 10/01/2013 - 09/30/2014 and pulled 2/3/2015)

			Community			Non-Transient Non-Community			Transient Non-Community		
VIO	RULE	SubRULE	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
MCL	Chems	Arsenic	235	53	10	30			3		
		IOC	142	26	8	27					
		Nitrates	143	2	1	30			55		
		VOC	4								
	Radiological (Rads)		323	56	3				5		
	Disinfection By-Products Rule	Stg1	100	43		5					
		Stg2	68	9	20	3					
	Surface Water Treatment Rules	Long Term 1	3	14	12						
		Long Term 2			12						
		SWTR	2		1						
	Lead and Copper Rule		89	11	2	56			1		
	Ground Water Rule		1			2			3		
	Total Coliform Rule		53	19	22	16	1		43		
MR	Chems	Arsenic	70	3	2	14					
		IOC	629	19	18	113			5		
		Nitrates	155	9	7	29			84		
		SOC	1401	88	138	370			52		
		VOC	567	63	42	84					
	Radiological (Rads)		183	3	15						
	Disinfection By-Products Rule	Stg1	884	54	29	216			11		
		Stg2	12		4	2					
	Surface Water Treatment Rules	Long Term 1	44	9	12				10		
		SWTR	1	2							
	Lead and Copper Rule		2315	369	170	905	7		17		
	Ground Water Rule		332	75	36	77			266		
	Total Coliform Rule		537	22	10	215			660	1	
	Consumer Notification	CCR	1358	53	34	2			16		
		PN	3514	174	91	537	1		1824	2	

# APPENDIX K

Texas Commission on Environmental Quality (TCEQ) Top 50 Systems in Violation by Population 10/01/2013 THRU 09/30/2014			IOC			St1 DBP			St2 DBP			LCR	LT1		TCR		GWR		PN Rule	
			Arsenic	Fluoride	Selenium	Bromate	Chlorine	Chlorite	HAA5	TTHM	LCR	LT1	TCR	E. COLI	GWR	CCR	PN			
Pop	PWSID	PWS Name	MCL	MCL	MCL	MR	MR	MR	MR	MCL	MR	MR	MR	TT	MCL	MR	MR	Other	Other	Other
1,596,714	TX0150018	San Antonio Water System															1			1
1,253,000	TX0570004	Dallas Water Utility																		1
903,570	TX2270001	City Of Austin Water & Wastewater																		1
748,450	TX2200012	City Of Fort Worth														1				1
631,442	TX0710002	El Paso Water Utilities Public Service B				1		1												
307,000	TX1780003	City Of Corpus Christi														1				2
269,330	TX0430007	City Of Plano																		1
226,876	TX0570010	City Of Garland					1													
199,715	TX2400001	City Of Laredo							1	1	1	1				1			1	3
183,372	TX0570048	City Of Grand Prairie																		2
149,000	TX0430039	City Of Mckinney					1													
139,950	TX0570014	City Of Mesquite										1								
137,147	TX0140006	City Of Killeen																		1
127,003	TX1550008	City Of Waco										1							1	
123,450	TX0150249	SAWS Southside															2			1
119,385	TX1650001	City Of Midland Water Purification Plant	2	2	1					3										4
115,233	TX0610002	City Of Denton				1														
114,624	TX0200008	City Of Pearland															1	2		5
113,033	TX0680002	City Of Odessa										2								
110,058	TX1010293	City Of Pasadena															2			2
109,311	TX1080029	North Alamo WSC						1		1							2	1	5	3
109,242	TX2120004	City Of Tyler				2						2								2
101,314	TX2430001	City Of Wichita Falls						1											3	
88,606	TX0430025	City Of Allen																		1
83,560	TX0840007	City Of League City										1				1			2	
79,254	TX0790005	City Of Sugar Land						1					1							
77,058	TX1080008	City Of Mission										1								
76,201	TX0210001	City Of Bryan																	1	
76,008	TX1010348	City Of Houston UD 5 - Kingwood										2			1		1			1
69,180	TX0140005	City Of Temple						1											1	
64,780	TX2200063	City Of North Richland Hills																	1	2
61,971	TX2460009	City Of Cedar Park										1								
61,360	TX1080009	City Of Pharr										2							1	
60,103	TX0460001	New Braunfels Utilities															1			
59,154	TX2120063	Southern Utilities															1			
57,998	TX0210017	Texas A&M University Main Campus										1			1					1
57,840	TX0150171	SAWS Northwest										1					1			
56,694	TX1230009	City Of Port Arthur												1						
56,601	TX0110013	Aqua WSC										1							2	
56,200	TX0840003	City Of Galveston							1		1	1							1	1
56,199	TX0570056	City Of Rowlett																	1	
54,250	TX0140107	US Army South Fort Hood										2							1	1
53,540	TX1050001	City Of San Marcos								4										1
53,488	TX2460001	City Of Georgetown										1								
53,298	TX0710154	Lower Valley Water District					1					2						1	5	5
52,780	TX2200031	City Of Euless																		1
50,591	TX0570006	City Of Desoto																		4
50,200	TX1700001	City Of Conroe																		1
50,106	TX1080033	Sharyland WSC										1								
49,950	TX2200003	City Of Bedford										1					2			1
9,555,189	# Violations		2	2	1	4	3	5	2	9	2	25	1	1	2	4	14	4	26	50
	# Systems		1	1	1	3	3	5	2	4	2	19	1	1	2	4	10	3	14	27
	Population Served		119,385	119,385	119,385	855,917	429,174	990,501	255,915	481,951	255,915	1,538,631	79,254	56,694	134,006	1,338,725	2,357,212	277,233	1,168,972	6,992,569